# An Examination of Attachment Status of Preschool Children

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### Abstract

The goal of this study is to study factors that influence attachment status of preschool children. Type of the study is relational screening and its sample comprise 78 typically developing children between 60-77 months who attend a Kindergarten affiliated to the Directorate of National Education in Süleymanpaşa district of Tekirdağ province. The obtained data about several demographic features of children "General Information Form" and "Incomplete Doll Family Story Scale (IDFSS)" which was developed by Cassidy (1988) and adapted to Turkish language by Seven (2006). Data frequency, percentage and distribution were found with General Information Form and data was found typically distributed. In statistical analysis, t test was used in cases where number of groups was two and one-way variance analysis in cases where it was three or higher. Data was analyzed in SPSS 22.0 at 0.05 significance level. Total attachment score of children aged 60-77 months was found 21.38 at the end of the study. Avoidant attachment was observed in 53.8 of children while 15.4% were negatively and 30.8% were securely attached. Thus, it was found that 69.2% of children were insecurely attached while 30.8% were securely attached. Study findings suggest that attachment level of children differed in favor of girls with regards gender while it did not differ in terms of other variables such as number of siblings, family type, socio-economic status of families, post-natal working status of mothers, caretaker person between 0-1 ages.

Keywords: attachment, secure attachment, insecure attachment, preschool period, parent

# 1. Introduction

Developed by Bowlby and Ainsworth in order to describe close relationships at infancy and their life-long effects (Ainsworth & Bowlby, 1991), attachment has recently become one of the most widely recognized theories that explain the impact of close relationships, particularly parent-child relationship on the child's mental, emotional and behavioral development and relevant dynamics (Bowlby, 1982).

Basic principle of attachment theory is the mother offering the child a setting where the child may examine the outer world and safely return when necessary (Tüzün & Sayar, 2006). Attachment relationship develops during the first nine nine months of the child's life and they constitute the beginning point of biologically driven social relationships between child and mother. The more emotional and social interactions babies go through with the preferred attachment model, the more individuals they are attached to (Erden, 2015). Bowlby suggests that selection of attachment figure is based on the figure's warmth, sincerity, availability, sensitivity and reliability (Levy, Blatt, & Shayer, 1998).

According to attachment theory, relationship between the baby and caregiver is the joint product of signs from the baby that attracts the caregiver's attention (smiling) and interest (distress and crying) and caregiver's responses to these signs (sensitivity and responsiveness) (Sroufe, 1985). Quality of attachment between the baby and caregiver constitutes the basis for "confidence" (Bartholomew & Horowitz, 1991). According to Bowlby (1969), attachment deficiencies of a child are related to three psychological situations during the first three years of the child. These are protest, despair and denial or detachment. Protest involves the serious distress caused by detachment while despair involves mourning, withdrawal and desperateness. The child seems incapable of developing proper attachment with the primary caregiver after a denial or detachment. The child may even lose attachment ability.

Inner working models that develop as a result of child-mother relationship constitute the basis for their personality formation in the future. Children form these inner working models with their attachment figures and

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it is known that reflect them into interpersonal relationships at adulthood and organize their relationships according to these models (Shaver & Mikulincer, 2004). It has been shown that attachment security is a valuable self-resource not only in parent-child relationship but also various individual and social development fields such as competence at social relationships, curiosity and confidence in exploration activities (Cassidy, 1988; Kerns et al., 1996; Thompson, 1999). The first relationship of a healthy baby born with socialization potential constitutes the basis for all of his/her social relationships (Keskin, 2013). Children who are happy with their parents have more positive interactions with their peers. Therefore, these children display more socially appropriate behaviors at preschool period (Howes & Matheson, 1992; cited by Berk, 2013). A warm, emotional maternal attitude that cares for the child's needs is necessary for the infant's development. Separation from mother at 0-3 year period influences the child's linguistic and academic development unfavorably (Standler, 1952; cited by Keskin, 2013). Waxler, Yarrow, and King (1979) found that helping and comforting distressed people is a behavior type that usually develops in the second year of the child and behavior style is significantly influenced by mother's behavior towards the child (cited by Bowlby, 2014). Many studies suggest that secure attachment to mother has positive impacts on social and emotional development of children (Arend, Gove, & Sroufe, 1979; Belsky & Cassidy, 1994; Colman & Thompson, 2002; Papalia, Olds, & Feldman, 2004; Seven, 2006; Türköz, 2007; Uluç & Öktem, 2009).

Given that attachment is a situation that develops at very early stages and influences human life in multiple ways, we can understand how important and necessary it is to conduct research on attachment at preschool period. Findings of a study on attachment status of preschool children may be used in strengthening mother-child relationship. Thus, children might be encouraged to set off their life journey as more healthy and self-confident individuals. This idea has motivated the authors to study attachment status of normal-developing preschool children and factors influencing this status.

### 2. Marerials and Method

## 2.1 Study Model

"Relational screening model" was used in this study in order to examine attachment status of preschool children and variables that influence attachment status (Karasar, 2009).

# 2.2 Sample

The study sample involves 78 children aged 60-77 months who are educated at a government kindergarten affiliated to Ministry of National Education in Süleymanpaşa district of Edirne Province in 2014-2015 academic year.37.2% of participants are girls while 62.8% are boys. 29.5% of children are between 60-65 months, 37.2% between 67-71 months and 33.3% between 72-77 months. 61.5% of the sample are the first child of the family, 10.3% the middle or one of the middle children, 28.2% the last child while 32.1% are single child and 68% have 2 to 4 siblings. 82.1% of families are nuclear families and 17.9% large families. 16.7% of families are of high social status, 75.6% of medium and 7.7% of lower social status. 29.5% of mothers are literate/primary school graduate, 23.1% high school graduates, 11.5% vocational school graduates and 32.1% university graduates while 20.6% of fathers are literate/primary school graduate, 39.7% high school graduates, 9% vocational school graduates and 26.9% university graduates.

### 2.3 Data Collection Tools

Authors used "General Information Form" in order to collect several demographic data of children and parents and "Doll Story Completion Task" (DSCT) developed by Cassidy (1988) and adapted to Turkish by Seven (2006) in order to identify attachment status of children.

### 2.3.1 General Information Form

General Information Form is a measurement tool developed by the author in order to identify demographic data of children and may be filled with either parent. The form includes questions to identify the child's gender, order of birth, number of siblings, family type, family's socio-economic status, parents' education status, mother's post-natal working status and caregivers during the first year.

### 2.3.2 Doll Story Completion Task (DSCT)

Doll Story Completion Task is a projective story-based measurement tool developed by Cassidy (1988) in order to identify children's attachment status and adapted to Turkish and tested for validity and reliability by Seven (2006). The children are asked to use a doll family to complete six stories each taking approximately 3 minutes. Children are expected to reveal their mental attachment representations through these stories. It is possible to discover children's trust relationship with themselves and mothers. Each story is scored on a five-point scale

according to story details (Seven, 2006). Higher scores indicate a secure relationship with the attachment figure. Moreover, each story is placed under a category and stories are classified as secure/strong if the doll character is seen valuable and relationship with mother is found important, special and warm (Seven, 2006). Scores on the upper end of the scale are given to the stories that reflect a secure relationship with the attachment figure. Additionally, each story was classified and reliability and validity of the scale was tested by Cassidy (1988) according to three categories. Consistency of the scale with "Cassidy Doll Interview", "Harter Social Recognition and Competence Scale" and "Cassidy Self-Interview Scale" was found between .47-.68. Alpha Reliability coefficient was found .78 and test-retest coefficient .63 (Seven, 2006). At the end of validation and reliability analysis, Alpha Reliability coefficient (a) was found .83. Results of AFA over scores from DSCT scale show that the scale has single factor. This structure accounts for 56% of total variance. Co-variance on the items ranges between 39-73%. Factor load values of the scale range between .60-.85. In this study, Alpha Reliability coefficient (a) of DSCT attachment scale was found .88. Practices were recorded on camera and scored between 1 and 5 by two coders according to the children's responses. The highest scale score is 30 and the lowest is 6. Higher scores indicate attachment security of high level while lower scores indicate low level. Reliability of the scores given by the author was studied by checking their correlation with scores given by a second independent coder. Correlation coefficient between total scores of two coders was found .94.

### 2.4 Findings

Data obtained from "Doll Story Completion Task Scale" and "General Information Form" were analyzed on SPSS-22.00 statistics program and tested at 0,05 significance level. Data from General Information Form were evaluated according to percentage distribution.

Table 1. Variance Homogeneity Levene Test

	Levene	Sd1	Sd2	P	
Attachment Scale	.230	3	74	.875	

Levene statistics was used in order to test variance homogeneity. It was found that groups were distributed homogenously and parametric techniques could be used. In addition to Levene test, skew and kurtosis values of attachment mean values (Table 2).

Table 2. Descriptive Statistics on Attachment Scale

	n	$\overline{X}$	SS	Min	Max	Skew	kurtosis
Total Attachment	78	21.38	4.69	10	29	-663	-281

In Table 2, arithmetic average for DSCT is 21.38, standard deviation 4.69, skew -663 and kurtosis -281. These findings show that DSCT attachment scale scores are distributed normally (Kline, 2005). Therefore, independent group t-test and one way variance analysis (ANOVA) were used in order to compare "Doll Story Completion Task Scale" scores with variables in "General Information Form".

Participants of the study were divided into three groups according to their attachment scale scores; negative, avoidant and secure attachment. Classification of children was based on average and 1.00 standard deviation. Thus, those whose scores were 1.00 standard deviation under average value or lower (17) were appointed to negative group; those who scored 1.00 standard deviation or higher (25) were involved in secure group while those in 1.00 standard deviation interval were appointed to avoidant group (Seven, 2006). Similarly, Seven (2006) found in a study that total attachment scores of six-year-old children was 20.57.

Distribution of children's attachment status according to DSCT scale scores is given on Table 3.

Table 3. Distribution of children's attachment status

		N	%	Total
	Negative	12	15.4	
Attachment Type	Avoidant	42	53.8	78
	Secure	24	30.8	

Given the distribution on Table 3, it is seen that children with avoidant attachment constitute the largest group with 53.8%. The rate of secure attachment was found 30.8% while the negative attachment 15.4%. The rate of secure, avoidant and negative attachment shows us that 69.2% of children attach insecurely while 30.8% attach securely.

In a study on children with delayed adaptation to preschool, Barone and Lionetti (2011) achieved similar findings to our study and revealed that 25% of children developed secure attachment, 40% insecure attachment and 35% disorganized attachment. Green et al. (2000) carried out a longitudinal study to evaluate attachment security of adolescents and reported that 29% of children had secure attachment style, 57% insecure and 14% disorganized attachment style. Seven (2006) carried out a study in order to evaluate the relationship between social skills level and attachment status of six-year-old children attending kindergarten and found out that 80.9% of children attached insecurely and 19.1% attached securely, which supports the present findings.

Contrary to these findings, there are also studies that have found higher proportion of secure attachment. In a study to examine the relationship between child-mother attachment of six-year old children and social competence at school, Cohn (1990) reported that 55% of American children developed secure attachment and 45% insecure attachment. Güner (2011) studied the attachment security of children and parents and found that 87.7% of children developed secure attachment while 12.3% insecure attachment. Uluç and Gökten (2009) evaluated secure place scenarios of children and found that majority of stories (75%) included secure scenarios.

It was found that studies on children from different cultures might reveal different results regarding the percentage of secure and insecure attachment styles. This may be attributed to demographic aspects of sample children and differences in their relationship with the caregiver.

Table 4. Mean, standard deviation and t-test results of children in attachment scale according to their gender, number of siblings, family type and mothers' post-natal working status

	n	$\overline{X}$	SS	t	sd	p
Girl	29	3.9483	.67275	3.579	76	.001*
Boy	49	3.3367	.76034			
Single Child	25	3.5533	.87231	.011	76	.991
2-4 Siblings	53	3.5513	.74209			
Nuclear Family	64	3.5729	.83564	.211	76	.833
Extended Family	14	3.5238	.49725			
Worked	42	3.5397	.81218	296	76	.768
Not Worked	36	3.592/6	.75849			

According to Table 4, there is a statistically significant difference between children' total scores in attachment scale in terms of gender ( $t_{(76)}$ =3,579; p<.05) while there is no significant difference in terms of number of siblings ( $t_{(76)}$ =.011; p>.05), family type ( $t_{(76)}$ =.211; p>.05) and mothers' post-natal working status ( $t_{(76)}$ =-.296; p>.05).

These findings show that total attachment level of 60-77 month-old girls ( $X_{\rm (Girl)}$ =3,9483) is higher than that of boys ( $\overline{X}_{\rm (Boy)}$ =3,3367). Thus, it was observed that girls were more securely attached than boys. Research on the impact of gender alone on attachment and the relationship between gender variable and attachment are very

common in literature. Pierrehumbert et al. (2009) concluded in their attachment story completion task that narrations of girls were more secure than those of boys and girls displayed significantly more secure attachment representations than boys. Sokolowski and Bost (2005) found in their study that attachment scores of girls were significantly higher than boys. Sher-Censor and Oppenheim (2004) reported in their study that girls referred to more positive, sensitive and higher quality relationships with caregivers in their attachment stories than boys. Aracı (2007) detected in his study that women were more securely attached to mothers than women and were inclined to be attached to fathers securely as well.

Characters of girls and boys develop in different ways. Girls are more sentimental and vulnerable. Boys are not as sensitive as girls and have a more difficult realm of feelings. Mothers are more inclined to protect daughters. Additionally, girls welcome affection, a skill that boys lack. Parents unconsciously respond to girls' chirping and girls easily take environmental support (Güneş, 2015). Therefore, it may considered that girls develop more secure attachment than boys.

Contrary to these research findings, there are also studies concluding that gender does not influence attachment security. Lecompte et al. (2014), Bureau et al. (2014), Ainsworth et al. (1978), Karairmak and Duran (2008) and Seven (2006) detected in their studies that attachment security did not differ according to gender.

There are also studies supporting the finding of the present study that attachment status of children do not vary according to number of siblings. Türköz (2007) and Keser (2006) concluded that having no sibling did not influence attachment at all. Attachment is a relationship between caregive and child. Mother's attitude towards the child and his/her needs is the predictor of attachment feeling. A secure attachment develops between a mother and child whose needs are fulfilled consistently and sensitively by the mother and who receive unlimited and unconditioned love and affection. A child deprived of such an attachment figure cannot be expected to develop a secure attachment. Mother is the only figure that the baby is initially aware of and establishes an attachment with, which excludes his/her siblings from this relationship. It is not surprising that number of siblings has no impact on attachment security.

There are several studies whose results support the finding of the present study attachment status does not depend on the family type, that is nuclear or extended family. Studies on attachment status of children by Simoes et al. (2011), Akdağ (2011) and Uluç and Öktem (2009) revealed that there was not a relationship between family type and attachment style of children. Contrary to nuclear family, extended family involves close relatives in addition to parents and children. Ball (1987) revealed in his theory that "Mothers' natal and post-natal emotional status is influenced by family, social support systems and quality of support they receive" (cited by Ertürk, 2007). Metin (2014) found in his study that social support received by mother after birth positively influenced her attachment score. Balcı (1997) reported that assistance of other family members to mother on child care helped development of mother-child attachment. On the contrary, Alan (2011), Gürol (2010) and Şolt (2011) reported in their studies that social support to mother after birth did not influence attachment score. The present study has found no relationship between family type of children and attachment security, which may be explained by the fact that attachment is a concept that develops as a result of the relationship between child and caregiver while other members of the family have no influence on this relationship. Contrary to these studies, Seven and Ogelman (2012) found out that attachment security of children living in nuclear families is stronger than children living in extended families.

No difference was found between attachment status of children based on mothers' post-natal working status. Several researchers have suggested that mothers' employment in the first post-natal year influences mother-child relationship negatively as it is a critical period for attachment, adding that children whose mothers return to work during the first year may develop a less secure attachment style. Vaughn, Deane, and Waters (1985) examined 24th month attachment status of children whose mothers started working shortly after birth and concluded that they often developed insecure attachment. Schwartz (1983) carried out a study on a group of 18-month-old babies whose mothers started working during the first nine months and found out that these babies displayed more avoidant behavior upon reunion than babies who were looked after their mothers. However, findings of the present study do not support this view. No relationship was found in the present study between mothers' post-natal working status and attachment. Interestingly, many local and international studies have yielded results that support these findings. Similarly, Chase-Lansdale and Owen (1987) concluded that there was not a relationship between mothers' working status and attachment security of babies whose mothers returned to full-time jobs in the first six months. Barglow, Vaughn, and Molitor (1987) reported in their study that more than 50% of children who returned to work in the first year were attached securely, suggesting that a caregiver except mother would not necessarily end in insecure attachment. Owen, Easterbrooks, Chase-Lansdale, and Goldberg (1984) carried out a longitudinal study to evaluate 12th and 20th month attachment security of children whose mothers worked full-time or part-time for minimum 3 months or did not work at all in the first one year and concluded that there was not a relationship between mothers' post-natal working status and children's attachment security. In a study on families with lower income, Vaughn, Gove, and Egeland (1980) examined three groups of children with an average age of 12 months. These were children with full-time or part-time working mothers and children with non-working mothers. They concluded that there was not a difference among three groups in terms of attachment security. Hock (1980) carried out a study with middle-class women with good child care qualities to evaluate the impact of mother's employment on attachment upon starting work three months after birth and found no difference between post-natal 12th month attachment security of mothers who returned to work and stayed at home with their children. Metin (2014) and Öztürk (2010) concluded in their study that there was not a significant difference between mothers' maternal attachment scores and working status. Karaboğa (2011) concluded that level of secure attachment, fearful attachment and preoccupied attachment did not differ significantly according to mothers' working status. Cebeci (2009) reported in a study on adolescents that attachment status did not vary according to mothers' working status. İlarslan (2009) and Keser (2006) achieved the same results in their study. The fact that no relationship was found between attachment security and mothers' working status may be attributed to the importance of the first attachment relationship and that babies develop secure or insecure relationships with other adults around as they developed internal working models positively or negatively. This was also found in Strange Situation Procedure. Securely attached babies were able to maintain their relationship with strangers when mothers were absent while avoidant babies rejected interaction with the stranger, displayed preoccupied and distressful behavior (Ainsworth, 1978). These results might help relieve mothers who have to start work shortly after birth and feel guilty for doing so.

Table 5. Presents variance analysis results of attachment scale according to children's order of birth, families' socio-economic status, parents' educational status and people who assumed their care in 0-1 year period

Variables		Total Square	sd	Mean Square	F	p
Order Of Birth	Inter-groups	.362	2	.181	.290	.749
	Intra-groups	46.873	75	.625		
	Total	47.235	77			
Socio-Economic	Inter-groups	1.720	2	.860	1.417	.249
Level of	Intra-groups	45.516	75	.607		
Families	Total	47.235	77			
Educational	Inter-groups	.705	4	.176	.277	.892
Status of	Intra-groups	46.530	73	.637		
Mothers	Total	47.235	77			
Educational	Inter-groups	.553	4	.138	.216	.929
Status of	Intra-groups	46.682	73	.639		
Fathers	Total	47.235	77			
Person Who	Inter-groups	.087	2	.043	.069	.933
Assumed	Intra-groups	47.148	75	.629		
Child-Care	Total	47.235	77			

Table 5 shows that attachment scale total scores did not vary according to order of birth  $(F_{(2-75)}=,290; p>.05)$ , families' socio-economic level  $(F_{(2-75)}=1.417; p>.05)$ , mothers'  $(F_{(2-75)}=.277; p>.05)$  and fathers' education status  $(F_{(2-75)}=.216; p>.05)$  and caregiver figure in the first 1 year  $(F_{(2-75)}=.069; p>.05)$ .

The study indicated that being the first, middle or last child did not influence attachment security. Lack of relationship between birth order and attachment security may be explained by the fact that motherhood is a behavior that is programmed to a woman's brain before birth, influence of several hormones on the brain during pregnancy and activation of these hormones during post-natal period (Eşel, 2010). As growth process, spiritual and physical needs of all children are the same, mothers spend the same amount of time for each child and display the same love and compassion. Results in literature support findings of the present study. Werner et al.

(2015), Buunk (1997) and Cohn (1990) reported in their studies that there was no correlation between birth order and attachment security. Ljzendoorn et al. (2000) found out that birth order influenced maternal sensitivity and mothers tended to be more sensitive to first child than the second but there was no correlation between birth order and attachment security. Contrary to these studies, Corcoran (2013) found in his study that that there was significant difference between avoidant attachment scores and total attachment scores of first and last children. Bakermans-Kranenburg, Ljzendoorn, and Kroonenberg (2004) concluded that boys born first achieved higher level of attachment adaptation with their siblings.

No significant correlation was found between families' socio-economic level and children's attachment status. This finding is supported by studies in literature. Lecompte et al. (2014), Bakermans-Kranenburg, Ljzendoorn, and Kroonenberg (2004), Teti et al. (1995) concluded that there was not a significant correlation between socio-economic status and attachment security. Again, Cebeci (2009), Tüköz (2007) ve Keser (2006) found that there was not a correlation between socio-economic level and attachment. Lack of significant correlation between socio-economic level and attachment may be explained by the fact that motherhood is programmed into a woman's brain before birth, mother's brain is much more different than non-bearing peers and particularly sensitive to the child's needs (Eşel, 2010), a situation that cannot be explained by socio-economic level. Considering that perception of socio-economic preoccupations and basic requirements changes with time and age, this result may be explained by the fact that no awareness of these concepts occurs during infancy and socio-economic conditions have no influence on the relationship between the baby and caregiver. Contrary to these studies, Mckenna (2009) reported in a study that insecure attachment developed as a result of increased risk factors caused by poverty. Similarly, Seven (2006) reported that socio-economic conditions influenced attachment security and increased socio-economic level resulted in increased attachment security.

No significant correlation was found in the study between parents' education status and attachment. Similarly, Lecompte et al. (2014), Teti et al. (1995) found that there was no correlation between mothers' education status and children's attachment security and Brown et al. (2007), Cohn (1990) and Karaboğa (2011) reported that there was not a correlation between fathers' education status and children's attachment security. Ward and Carlson (1995) reported in their study that mothers' education status did not influence their maternal behavior because maternal was a natural part of women, adding that there was not a significant correlation between mothers' education status and attachment.

Lack of correlation between parents' education status and children's attachment security may be explained by the fact that parents with any education level are able to display behaviors required for forming attachment such as touching, fulfilling basic needs and sensitivity. Additionally, every parent has the chance to find information on child development regardless of their education level. On the other hand, lack of correlation between fathers' education status and children's attachment security may be associated to the fact that mothers are often the primary figures in fulfilling children's needs and making physical contact with them in every culture and fathers are generally play an assistance role in childcare and do not make physical contact as much as mothers. Contrary to this finding, Haltigan et al. (2012) found that there was a significant relationship between mother's education level and the child's attachment security. They reported that low education status of mother influenced child's attachment security negatively. Thompson and Stewart (2007) found that attachment security of children whose mothers were of higher education level was higher as well. Seven (2006) revealed in his study that children's attachment level varied according to fathers' education level. He found that children of fathers with lower education level had lower attachment security than other groups.

No correlation was found between attachment security of children in the study and their caregivers at 0-1 year (0-12 months) period. Several researchers suggested that receiving childcare services in the first year from a person other than the mother might influence attachment negatively. In a study where Türköz (2007) examined the attachment security of preschool children, he found that 28.6% of children in insecure attachment group were cared by mothers in the first while 71.4% were cared by other caregivers (baby sitter, grandparent, relatives). Findings of the present study do not comply with this view. It was found that children in sample group who were not cared by mothers in the first year were cared by grandmothers or babysitters. This study finding indicated that attachment security is not influenced by the identity of the caregiver. Lack of correlation between attachment and caregiver identity in the first year may be explained by the fact that children are cared for during the day and their relationships with the caregivers do not replace their relationships with mothers. It was found that all children in the study were cared for at home. Being cared for at a familiar setting may prevent any interference in attachment security. Fulfillment of their needs on time in a sensitive and continuous manner may help sustain attachment feeling. It is known that infants develop multiple attachments in some cases (Bowlby, 1969). Continuity of a caregiver other than the mother may cause the child feel confident. Bowlby (1980) suggested that

infants were able to display attachment behavior to figures who assume the mother figure.

It was found that local and international studies have yielded results that support the findings of the present study. Similarly, Ahnert, Pinquart, and Lamb (2006) revealed that 42% of children were securely attached to professional caregivers and secure child-caregiver attachments were seen at home-centered child care rather than care centers. Additionally, they concluded that there was a slight correlation between attachment to caregivers and parents (both mother and father). Other findings of the study are that vast majority of children are attached securely to their caregivers and this attachment depends on the care type while attachment relationships with parents and caregivers do not have to be alike. Howes (1999) suggested that more than one caregiver may be able to assume the role of attachment figures for a child. Studies by Howes et al. indicated that a secure attachment relationship with a professional caregiver compensated an insecure attachment relationship with the mother (Howes, Rodning, Galuzzo, & Myers, 1998) and security of attachment to the babysitter was more effective than child-mother attachment security in predicting the child's social competence (Howes, Matheson, & Hamilton, 1994). Barnas and Cummings (1994) found in their study that children were able to form attachment to caregivers who provide them regular care. In a study on Scottish infants, Schaffer and Emerson (1964) found that 29% of children directed attachment behavior to more than one figure from the time they begin to display this behavior. They reported that more than half of children had more than one attachment figure from the fourth month and 13% of these children limited attachment behavior to a single person after completing 18 months (cited by Bowlby, 1969). Studies in our country yielded similar results. In a study on adolescents, Akdağ (2011) secure attachment style was not related to the person who raised the child during infancy and childhood. Yalçın (2010) reported in his study that there was not a correlation between maternal attachment score and the caregiver of the infant. İlarslan (2009) studied attachment styles of children who were cared for by mothers or caregivers. Mother care included any family member (mother-grandmother-grandfather) and anyone outside the family was regarded as a caregiver. They found that there was not a significant difference between two groups in terms of comfort, resistant, avoidant attachment behavior and secure attachment scores. Cebeci (2009) found in a study that there was a significant difference between secure and insecure attachment scores of children who were cared for by their mothers and other people (relative, babysitter etc.).

It is possible to see studies in literature that have focused on attachment security of children who were cared for at care centers and home. A study in the United States of America by Lamp, Sternberg, and Prodromidis (1992) revealed that ratio of insecure attachment was relatively higher among children who attended care centers than those who did not (29% against 36%) (Lamp, Sternberg, & Prodromidis (1992, cited by Berk, 2013)).

### 3. Conclusions and Suggestions

At the end of the present study aiming to examine attachment status of preschool children and influencing factors, total attachment score of 60-77 month children was found 21.38. Children with avoidant attachment constituted the largest group with 53.8%, while the rate of negative attachment was 15.4% and secure attachment 30.8%. Thus, it was found that 69.2% of children developed insecure attachment and 30.8% secure attachment. Study findings show that attachment level of 60-77 month children varied in favor of girls according to gender variable while it did not change according to variables such as number of siblings, type, family social level, parents' education status, mothers' post-natal working status and identity of the caregiver in 0-1 year period.

The fact that 69.2% of children in the study are insecurely attached has caused restriction in explaining variables related to attachment security. One of the most important restrictions of this study is the limited number of children in the study group. Another restriction of the study is that "Doll Story Completion Task Scale" did not measure "Disorganized Attachment", a combination of avoidant and ambivalent behaviors included in recognized attachment styles and categorized as insecure attachment defined by Main and Solomon (1986). It was difficult task to raise the number of children in study group as implementation and evaluation process of the scale took relatively a long time and evaluation was carried out by two different researchers. Involving more children will undoubtedly increase generalization of future studies.

Checking the literature for studies in Turkey on attachment at preschool period, we see that the number of scales is quite limited. Development of new scales appropriate for the culture will contribute significantly to the field. In future studies, widening age range and sample group, examining the relationship between attachment and various situations, achieving different results by conducting longitudinal studies on attachment will also contribute to science as well.

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### Note

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